ElectroForce® Testing News

Volume 8 • Number 11 • November 2016

Your success. Our mission.™

Newsletter At-A-Glance:

A2LA Certified! - TA ElectroForce® Receives A2LA Certification for ISO 17025:2005

TA ElectroForce is proud to announce our A2LA accreditation in accordance with the recognized International Standard ISO/IEC 17025:2005 General requirements for the competence of testing and calibration laboratories. Having this accreditation will give all ElectroForce users a higher level of confidence in new calibration reports. It also shows our sincere dedication to quality service and an ongoing commitment to provide accurate, repeatable and traceable calibrations on all new and existing ElectroForce test systems.

A2LA ACCREDITED
CERTIFICATE #4120.01

To see a copy of our accreditation certification, click here.

Contact Us to inquire about receiving a quote to calibrate your ElectroForce systems and receive your A2LA accredited calibration reports.

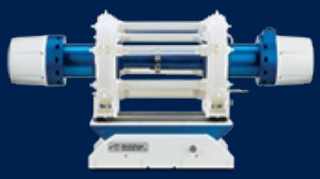
For the calibrations to which this accreditation applies, please refer to the laboratory's Calibration Scope of Accreditation.

Customer Research Highlight - Biaxial Characterization of Pulmonary Arteries

Understanding the impact of hypertension on pulmonary artery mechanical properties

CURRENT PROMOTIONS

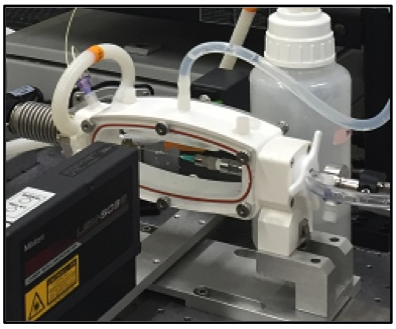
Get FREE accessories and FREE DMA software when you buy any 3200, 3300, or 3500 test frame.



Get a FREE DuraPulse Heart Valve Durability Test Instrument or 200N Single Motor Test Bench when you buy a new DuraPulse Stent-Graft Tester (SGT)

More Info

Academic Matching Grant Program



Pulmonary arterial hypertension (PAH) is a condition in which the blood pressure in the arteries between the heart and lungs is elevated. Over time, this causes the heart to work harder which can eventually lead to heart failure. Dr. Daniela Valdez-Jasso, Assistant Professor at the University of Illinois-Chicago, and her research group recently published work in which an axial-pulsatile BioDynamic test instrument was used to characterize biaxial properties of right and left pulmonary arteries that have been affected by PAH. The ultimate goal of this research is to better understand vascular remodeling that occurs when PAH is present.

To access the publication abstract, **click here**.

To visit Dr. Valdez-Jasso's research website, **click here**.

Customer Research Highlight - Mechanical Properties of Fine Aggregate Matrix in Asphalt Concrete

On the road to developing longer lasting roads

In his current research at Arizona State University, Assistant Professor Dr. Shane Underwood focuses on constitutive modeling and evaluation of asphalt concrete (AC) in order to develop better performing materials and improve its longevity. To do this he uses a multiscale modeling approach, examining AC and its constituents as the combination of different scales of materials in order to better understand how material characteristics are influenced by local scale changes. In a 2016 paper titled *"Development of Modulus and Fatigue Test Protocol for Fine Aggregate Matrix for Axial Direction of Loading"*, Dr. Underwood and Ph.D. student Padmini Gudidpudi used an ElectroForce 3330 to develop and establish protocols for evaluating the modulus and fatigue properties of fine aggregate matrix, a blend of fine aggregate particles, asphalt binder, and filler that exists one scale below asphalt.

The publication can be accessed through the ASTM website **here**.

To learn more about Dr. Underwood's research, click **here**.

ElectroForce Webinar! Characterization of Active Shape-Memory Polymers

TA will add $20,000 to the value of any grant for the purchase of a 3100, 3200, 3300, 5100, 5200, or Planar Biaxial System.

More Info

UPCOMING CONFERENCES

MRS Fall Meeting
November 27 - December 3
Boston, MA

ICI 2016
December 4 - 6
Tel Aviv, Israel

TERMIS-AM
December 11 - 14
San Diego, CA

Japan Society of Mechanical Engineers 29th Bio-Engineering Lecture
January 19 - 20, 2017
Nagoya, Japan

MD&M West
February 9 - 11, 2017
Anaheim, CA

Did you miss the recent TA ElectroForce webinar presented by Dr. Chris Yakacki? If you didn't get a chance to see it but would still like to watch it, you can! In the webinar, Dr. Yakacki, Assistant Professor at the University of Colorado (CU) Denver, introduces the basics of characterizing shape-memory polymers utilizing test instruments such as the Q800 and ElectroForce 3200. In addition, Dr. Yakacki included results from several studies that demonstrate how these materials can be investigated and explored.

To watch the webinar, click here.

To visit Dr. Yakacki's lab website, click here.